



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,400	04/19/2004	Anthony Sudano	1062742	9923
59152 7590 07/02/2007 OSLER, HOSKIN & HARCOURT, LLP (AVESTOR) 1000 DE LA GAUCHETIERE STREET WEST SUITE 2100 MONTREAL, QC H3B-4W5 CANADA			EXAMINER ALEJANDRO, RAYMOND	
			ART UNIT 1745	PAPER NUMBER
			MAIL DATE 07/02/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/826,400	Applicant(s) SUDANO ET AL.	
	Examiner Raymond Alejandro	Art Unit 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 3-9, 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,10,11 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>09/27/04 and 06/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I and Species I (claims 1-2, 10-11 and 16) in the reply filed on 05/28/07 is acknowledged. The traversal is on the ground(s) that apparently "*Claims 3-9 and 12-15...add limitations to the current collector*". This is not found persuasive because as admitted by the applicant and disclosed in the specification, the present application contains multiple, several, numerous embodiments represented by Figures 4-10 (*the identification of species as delineated in the restriction requirement of 04/26/07*). Therefore, the disclosure encompasses different and separated embodiments which are mutually exclusive. Applicant's attention is particularly directed to MPEP 809.02(a) which indicates how to identify species by illustrative figures, examples, mechanical means, particular materials, or other distinguishing characteristics. Accordingly, serious burden would be raised if the search of such different species was made as required for the separate, distinct and mutually exclusive species.

The requirement is still deemed proper and is therefore made **FINAL**.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 09/27/04 and 06/22/05 were considered by the examiner.

Drawings

3. The drawings were received on 04/19/04. These drawings are acceptable.

Specification

4. The disclosure is objected to because of the following informalities: the status of all non-provisional applications referenced in the specification must be updated. For example, see paragraph bridging pages 3-4 and 1st full paragraph on page 4. Appropriate correction is required.

5. The disclosure is objected to because of the following informalities: the as-filed disclosure contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For instance, the recitation Li_xC on page 1 of the as-filed disclosure fails to define or quantify the molar amount "x" so as to make it possible to ascertain what specific composition/compound thereof is/are ultimately intended. Assuming arguendo that molar amount "x" is not zero (0), then, at best, molar amount "x" can take the magnitude of 1. Other than that, there is no further support for other Li_xC compositions or compounds. Appropriate correction (without introduction of NEW matter) or clarification is requisitioned.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 10-11 and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Gauthier et al 5521028.

The aim of the present invention relates to an electrical contact wherein the disclosed inventive concept comprises the specific configuration of the connection.

Regarding claims 1 and 11:

Figure 6 of Gauthier et al is the basis for the anticipation analysis.

Gauthier et al disclose collector-electrode assemblies for thin film generators (TITLE). Gauthier et al disclose a battery being folded in two on itself (COL 14, lines 5-20); and stacking cells and their components (COL 6, lines 28-31 & 42-47/ COL 7, lines 25-30). Gauthier et al disclose electrochemical generators comprising electrodes (anode and cathode) and a polymer electrolyte (COL 1, lines 10-25 & lines 63-65/Col 5, lines 7-20/EXAMPLE 1).

Gauthier et al teach electrical contacts 9, 10 (COL 9, lines 44-50) which consists of metal added at the lateral ends of the assembly once the assembly is stacked in its final form (COL 6, lines 40-45).

Figure 6 below shows insulating plastic support film 2 which is a polymeric synthetic resin (COL 3, lines 55-60/ COL 4, lines 41-60/ COL 9, lines 29-32/EXAMPLE 1); metallic films 1 and metallic deposit 3 on both sides of the support film 2 (COL 3, lines 55-60/ COL 4, lines 10-27/COL 9, lines 21-35/Example 1); and electrode layers 4 (COL 9, lines 33-36/EXAMPLE 1). Reference numeral 8 is the conductive lateral margin of the current collector; and reference numeral 5 is the lateral margin of the plastic support film. Gauthier et al disclose that collectors can be made from at least Sn (COL 2, lines 12-15). *In this case, the electrical contact 9 is defining a space itself in which the ends of the current collector (i.e. the metal-coated support film constituted by reference numerals 1-2-3) are received, and a ductile electrically conductive*

Art Unit: 1745

material (namely, Sn) is part of the electrical contact itself and is adapted to form an electrical connection therebetween.

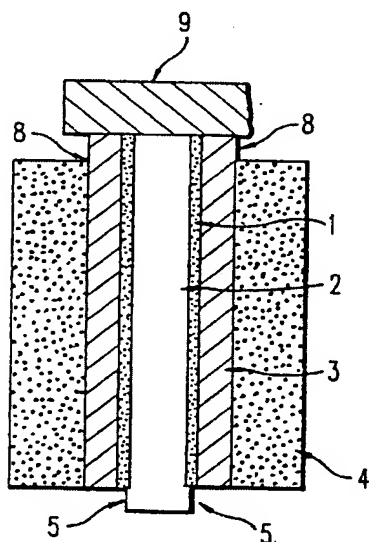


FIG. 6

Examiner's note: as to the limitation "adapted to", it is contended that this limitation does not distinguish over prior art because the recitation that an element/feature/member is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. See MPEP 2111.04.

Regarding claim 2:

In this case, the electrical contact 9 is defining a space itself in which the ends of the current collector (i.e. the metal-coated support film constituted by reference numerals 1-2-3) are received and crimped, and a ductile electrically conductive material (namely, Sn) is part of the electrical contact itself and is adapted to form an electrical connection therebetween. See FIGURE 6. It is noted that the term "crimp" means "to form into a desired form" or "to pinch or press together" as per Merriam-Webster's Collegiate Dictionary (10th Edition). Thus,

Art Unit: 1745

portions of the electrical contact 9 crimps onto the ends of the current collector constituted by the metal-coated support film constituted by reference numerals 1-2-3.

Regarding claims 10 and 16:

Gauthier et al disclose that collectors can be made from at least Sn (COL 2, lines 12-15).

It is noted that Sn is a ductile electrically conductive material.

Thus, the present claims are clearly anticipated.

8. (at least) Claims 1-2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Nachles et al 5298138.

As to claim 1:

Nachles et al disclose an electrically conductive material 40 (*the electrical contact*) which is in electrical contact with the interconnect strips 36 (*the current collecting elements*) on the underside of the top electrolyte plate 14 (COL 7, lines 29-48). A plurality of solid electrolyte plates arranged into a stack, each electrolyte plate having electrode material adherent thereto is disclosed (ABSTRACT). A metal such as Ag, Ag-alloy or Pt is used as the electrically conductive material (COL 5, lines 33-45)

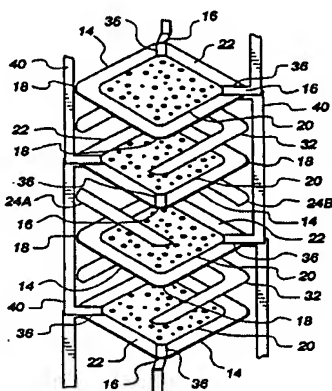


Fig. 2

In this case, the electrically conductive material 40 itself defines a space in which the ends of the interconnect strips 36 are received and crimped; and the electrically conductive material itself represents the ductile material forming the electrical bridge. Note that a metal such as Ag, Ag-alloy or Pt is used as the electrically conductive material (COL 5, lines 33-45). Notice also that the degree of ductility is unknown, thus, the foregoing metallic materials are capable of being fashioned or changed into a new form.

Examiner's note: *as to the limitation "adapted to", it is contended that this limitation does not distinguish over prior art because the recitation that an element/feature/member is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. See MPEP 2111.04.*

Regarding claim 2:

In this case, the electrically conductive material 40 itself defines a space in which the ends of the interconnect strips 36 are received and crimped; and the electrically conductive material itself represents the ductile material forming the electrical bridge. See FIGURE 2. It is noted that the term "crimp" means "to form into a desired form" or "to pinch or press together" as per Merriam-Webster's Collegiate Dictionary (10th Edition). Thus, portions of the electrical contact 40 crimps onto the ends of the interconnect strips 36.

Thus, the present claims are clearly anticipated.

Art Unit: 1745


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282. The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raymond Alejandro
Primary Examiner
Art Unit 1745



RAYMOND ALEJANDRO
PRIMARY EXAMINER